CLAIMS

1. A device for the relative angular adjustment of a camshaft of an internal combustion engine with respect to a drive wheel (6) driving the camshaft (4), comprising an epicyclic gear structure (16) having a drive-side ring wheel (7) connected to the drive wheel (6), a planet wheel (8) and a central sun wheel (9), an actuating means (12) connected to, and driving the central sun wheel (9), as a function of requirements, and a drive connection from the epicyclic gear structure (16) to the camshaft, said drive connection being formed by an output-side ring wheel (10) which is in meshing engagement with the planet wheel (8) and which has a number of teeth differing from that of the drive-side ring wheel (7).

2. The device for the relative angular adjustment of a camshaft with respect to a drive wheel driving the camshaft as claimed in claim 1, wherein the output-side ring wheel (10) has a larger number of teeth than the drive-side ring wheel (7).

3. The device for the relative angular adjustment of a camshaft with respect to a drive wheel driving the camshaft as claimed in claim 1, wherein the ring wheel (7) has a pot-shaped contour with an open side and the ring wheel (10) is axially inserted into the interior of the ring wheel (7) in such a way that the two ring wheels (7, 10) are arranged coaxially adjacent one another with their internal toothing (15, 18), and the drive-side ring wheel (7) is supported on the output-side ring wheel (10) via a roller bearing (17).

4. The device for the relative angular adjustment of a camshaft with respect to a drive wheel driving the camshaft as claimed in one of claim 1, wherein the planet wheels (8) are inserted, free of shaft bearings, between a thrust washer (23) on the ring wheel (7) and a flange (24) on the camshaft (1) so that they are secured only in the axial direction.

5. The device for the relative angular adjustment of a camshaft with respect to a drive wheel driving the camshaft as claimed in claim 1, wherein the sun wheel (9) is mounted firmly on a drive shaft (21) of the actuating means (11) which is an electric servomotor (12).